

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

SOUTHCO, INC. : CIVIL ACTION
: :
v. : :
: :
FIVETECH TECHNOLOGY INC. : NO. 10-1060

MEMORANDUM

McLaughlin, J.

September 19, 2013

The plaintiff, Southco, Inc. ("Southco"), is a manufacturer of hardware, including "panel" or "captive" screws. The defendant, Fivetech Technology Inc. ("Fivetech"), is a competitor of Southco. Southco has alleged patent and trademark infringement by Fivetech. Before the Court is Fivetech's motion for summary judgment of non-infringement of the '012 patent (Docket Nos. 207, 210). The Court will grant the motion.

I. Procedural History

Southco is a manufacturer of hardware, including panel screws. Panel screws are also known as "captive screws" or "fastener screws." Compl. ¶¶ 6-7. Fivetech, is a competitor of Southco. Answer ¶¶ 2, 7. Southco alleges that Fivetech has infringed on its patents and trademarks through the sale of Fivetech Series 46 captive fasteners ("Series 46 screws").

More specifically, Southco alleges infringement on its patent number 5,851,095 ("the '095 patent") issued on December 22, 1998; on its patent number 6,280,131 ("the '131 patent") issued on August 28, 2001; on its patent number 6,468,012 ("the '012 patent") issued on October 22, 2002; and on its Trademark registrations numbers 2,478,685 and 3,678,153. Compl. ¶¶ 11-15 ('095 patent), 20-23 ('131 patent), 28-31 ('012 patent), 36-44 (trademark).

The Court granted summary judgment in favor of Fivetech on both the '095 and '131 patent claims. (Docket Nos. 186, 195). The Court now considers Fivetech's motion for summary judgment of non-infringement of the '012 patent (Docket Nos. 207, 210).

II. Summary Judgment Record

A captive screw, or captive fastener, is a device that holds a screw in place while the screw is used to connect two panels. A cylindrical ferrule holds the screw, and a knob can be placed over the screw head. Def. Br. at 4-6. The question at issue in this motion is the scope of the claims language of Southco's '012 patent for captive screws.

The Southco '012 patent contains fourteen claims, four of which are independent. All of the fourteen claims are

alleged to be infringed. Whether the allegedly infringing screws contain an annular chamfer is in dispute in claims 2-5 and 7-14. Whether the Series 46 screws have material from the fastener's knob fill the annular chamfer is at issue in claims 2-5, 11, and 12. Whether the screws have a plurality of protrusions that function to rigidly secure the screw head to the knob is disputed in claims 1, 6, 8-10, and 14.

The language of the claims, with emphasis added to the disputed portions, is:

A captive screw attachable to a panel, for attaching the panel to a surface, the surface having a threaded hole, the captive screw comprising:

- a) a screw having a head portion and a shaft having at least a threaded portion, said head portion having an outer perimeter and a plurality of protrusions provided on said outer perimeter of said head portion;
- b) a knob having an inner surface, wherein said protrusions rigidly secure said head portion to said inner surface of said knob; and
- c) a ferrule having a first end and a second end through which said shaft extends, said ferrule having a panel attachment means at said first end to secure the captive screw to the panel.

U.S. Patent No. 6,468,012 col.6 ll.14-28 (filed Jul. 24, 2001)
(claim 1).

The captive screw according to claim 1, wherein said head portion has a top surface and a flat, annular bottom surface, said head portion further has an

annular chamfer¹ peripheral to said annular bottom surface of said head portion, and material from said knob fills said chamfer.

Id. col.6 ll.29-33 (claim 2).

Claim 3 is at issue because of it references claim 2:

The captive screw according to claim 2, wherein said knob has a top annular surface against which said head portion of said screw sits.

Id. col.6 ll.34-36 (claim 3).

A captive screw attachable to a panel, for attaching the panel to a surface, the surface having a threaded hole, the captive screw comprising:

- a) a screw having a head portion and a shaft having at least a threaded portion, said head portion having a top surface and a flat, annular bottom surface, said head portion further having an annular chamfer peripheral to said annular bottom surface of said head portion;
- b) a knob secured to said head portion, wherein material from said knob fills said chamfer; and
- c) a ferrule having a first end and a second end through which said shaft extends, said ferrule having a panel attachment means at said first end to secure the captive screw to the panel.

Id. col.6 ll.37-50 (claim 4).

Similarly, claim 5 is at issue because of its reference to claim 4:

¹ To "chamfer" is defined as "to bevel a sharp edge on a machined part." McGraw-Hill Dictionary of Scientific and Technical Terms 365 (6th ed. 2003); Def. Br., Ex. C ("Dornfeld Decl.") ¶ 6. The "chamfer angle" is the angle that the beveled surface makes with one of the original surfaces. McGraw-Hill Dictionary, supra, at 365; Dornfeld Decl. ¶ 6.

The captive screw according to claim 4, wherein said knob has a top annular surface against which said head portion of said screw sits.

Id. col.6 11.51-53 (claim 5).

A captive screw attachable to a panel, for attaching the panel to a surface, the surface having a threaded hole, the captive screw comprising:

- a) a screw having a head portion and a shaft having at least a threaded portion, said head portion having an outer perimeter and a plurality of protrusions provided on said outer perimeter of said head portion;
- b) a knob secured to said head portion and having an inner surface, said protrusions matingly engaging said inner surface of said knob to thereby help rigidly secure said head portion to said inner surface of said knob; and
- c) a ferrule having a first end and a second end through which said shaft extends, said ferrule having a panel attachment means at said first end to secure the captive screw to the panel.

Id. col.6 1.54 to col.7 1.2 (claim 6).

A captive screw attachable to a panel, for attaching the panel to a surface, the surface having a threaded hole, the captive screw comprising:

- a) a screw having a head portion and a shaft having at least a threaded portion, said head portion having a top surface and a bottom surface, said head portion further having an annular chamfer peripheral to said bottom surface of said head portion;
- b) a knob secured to said head portion; and
- c) a ferrule having a first end and a second end through which said shaft extends, said ferrule having a panel attachment means at said first end to secure the captive screw to the panel.

Id. col.7 11.3-15 (claim 7).

The captive screw according to claim 7, wherein said head portion has an outer perimeter and a plurality of protrusions provided on said outer perimeter of said head portion, said knob has an inner surface, and said protrusions matingly engage said inner surface of said knob to thereby help rigidly secure said head portion to said inner surface of said knob.

Id. col.7 11.16-22 (claim 8). Claim 8 also references claim 7, which discusses the annular chamfer.

Claims 9 and 10 reference claim 8, and are at issue because of those references:

The captive screw according to claim 8, wherein said bottom surface of said head portion is flat and annular, and said flat, annular bottom surface bears against said second end of said ferrule when said shaft is in a fully extended position, whereby a load on said screw is borne directly by said ferrule.

Id. col.7 1.23 to col.8 1.3 (claim 9).

The captive screw according to claim 9, wherein said knob has a top annular surface against which said head portion of said screw sits.

Id. col.8 11.4-6 (claim 10).

The captive screw according to claim 7, wherein said head portion further has an annular chamfer peripheral to said annular bottom surface of said head portion, and material from said knob fills said chamfer.

Id. col.8 11.7-10 (claim 11).

Claim 12 is at issue due to its reference to claim 11:

The captive screw according to claim 11, wherein said knob has a top annular surface against which said head portion of said screw sits.

Id. col.8 11.11-13 (claim 12).

Claim 13 is at issue because it references claim 7:

The captive screw according to claim 7, wherein said knob has a top annular surface against which said head portion of said screw sits.

Id. col.8 ll.14-16 (claim 13).

The captive screw according to claim 13, wherein said head portion has an outer perimeter and a plurality of protrusions provided on said outer perimeter of said head portion, said knob has an inner surface, and said protrusions matingly engage said inner surface of said knob to thereby help rigidly secure said head portion to said inner surface of said knob.

Id. col.8 ll.17-23 (claim 14). Claim 14 is at issue with regard to the annular chamfer because it references claim 13 and, by incorporation, claim 7.

Each claim in the '012 patent requires a captive screw containing three main structural features: the screw, the knob, and the ferrule. The first component, the screw, is described in the preferred embodiment as having an annular flange around the lower end of the screw head and a plurality of protrusions on the outer perimeter of the annular flange. Id. col.3 ll.28-31. The specification also describes how the attachment of the screw to the knob allows material from the inner surface of the knob to fill in the chamfer, creating structural advantages.

Id. col.1 ll.62-67.

The second component, the knob, preferably is partially hollow with a hollow cylindrical body that has a

region of increased thickness near the upper end of the knob and a top annular surface against which the head of the screw sits.

Id. col.3 ll.24-28. It is also preferably made of a soft material relative to the screw head so that the material in the knob is displaced by the protrusion of the screw in order to rigidly secure the screw to the knob. Id. col.3 ll.33-38.

The ferrule is also hollow and cylindrical, and the threaded shaft of the screw extends through the hollow ferrule. Id. col.3 l.18. When the screw is in its fully extended position, such as when the first panel is screwed down to the second panel, the load of the screw runs directly from the screw to the ferrule to the panel. Id. col.4 ll.31-34.

Standard screws are used in assembling the Series 46 screws. Def. Br., Ex. B ("Wang Decl.") ¶¶ 3-4. Fivetech attaches those screws to the knob using an injection molding process. Id. ¶ 8 (citing Mot. for Partial Summ. J. of Non-Infringement of Claims 16 and 17 of U.S. Patent No. 5,851,095, Ex. B ¶ 5, ECF No. 141-4).

III. Analysis²

In a patent infringement case, the court proceeds in two steps. In the first step, the court must construe the claims in the patent. Because a patent is a legal instrument, this is a question of law. The second step is a question of fact to be determined by the jury, unless the Court finds that there is no genuine dispute as to any material fact and that a party is entitled to judgment as a matter of law on whether the patent's claims are infringed. Markman v. Westview Instruments, Inc., 517 U.S. 370, 384-85 (1996).

A. Construing the Claim

In the first step of an infringement claim, the court must determine the scope and meaning of the asserted patent claims. Markman, 517 U.S. at 372-74; Searfoss v. Pioneer

² A party is entitled to summary judgment if there "is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). The moving party bears the initial burden of demonstrating the absence of any genuine issue of material fact, which may be satisfied by demonstrating the party who bears the burden of proof lacks evidence to support his case. Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). In making its determination, the court must consider the evidence in a light most favorable to the nonmoving party. Del. Valley Floral Grp., Inc. v. Shaw Rose Nets, LLC, 597 F.3d 1374, 1378-79 (Fed. Cir. 2010). Once a properly supported motion for summary judgment is made, the burden of production shifts to the nonmoving party, who must set forth specific facts showing that there is a genuine issue for trial. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 250 (1986).

Consol. Corp., 374 F.3d 1142, 1148 (Fed. Cir. 2004). The specific language used in the claim section of the patent is the focus of this inquiry. "Claim construction 'begins and ends in all cases with the actual words of the claim.'" Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (quoting Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1248 (Fed. Cir. 1998)).

The language of a claim is given the "ordinary and customary meaning" as understood by a person of ordinary skill in the art in question, unless the patentee provided a different definition for the term. Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc); Searfoss, 374 F.3d at 1149. There is a heavy presumption that claim language carries its ordinary and customary meaning.

The court may also consider other intrinsic evidence when construing the claim, such as specifications included in the patent and prior prosecution of the patent. When considering portions of the patent other than the claims, the Federal Circuit has cautioned that courts should not "import into a claim limitations that are not a part of the claim." Superguide Corp. v. DirectTV Enters., 358 F.3d 870, 875 (Fed. Cir. 2004). Claims should rarely be limited by the patent's preferred embodiment description or other specifications in the

patent not included in the claim language. Taskett v. Dentlinger, 344 F.3d 1337, 1340 (Fed. Cir. 2003); Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898 (Fed. Cir. 2004).

Patent language can, however, be helpful. A person of ordinary skill is deemed to read the claim term "in the context of the entire patent, including the specification." Phillips, 415 F.3d at 1313 (quoting Multiform Desiccants, Inc. v. Medzam, Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998)). Claims should be read in the context of surrounding words and as part of a "fully integrated written instrument." Id. at 1314-15. Claims "must be read in view of the specification . . . [which] is always highly relevant to the claim construction analysis. Usually, it is dispositive." Id. at 1315.

The same is true of the prosecution history of the claim. Prosecution history includes arguments distinguishing the patented device from prior art in response to a rejection of the patent claim. Id. at 1317. Although the prosecution history may lack the specificity of a claim, it can "inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention." Id. Interpretations which are "disclaimed during prosecution" cannot be included when the claim is construed against an accuser. Id. "Claims may not be construed one way

in order to obtain their allowance and in a different way against accused infringers." Southwall Techs. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed. Cir. 1995).

Extrinsic evidence, such as dictionaries, treatises, expert testimony, and inventor testimony, can also be considered by the court construing the claims, but are less significant than the patent itself in determining the legally operative language. Phillips, 415 F.3d at 1317. Extrinsic evidence cannot be relied upon to "vary or contradict the clear meaning of terms in the claims." Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003).

B. Determining Infringement

The second step, determining infringement, is a factual question to be determined by the jury, unless the Court finds that there is no genuine dispute as to any material fact and that a party is entitled to judgment as a matter of law on that issue. There are two types of infringement: literal infringement and infringement under the doctrine of equivalents. Literal infringement requires that every limitation of the patent claim must be found exactly the same in the accused product. If any claim limitation is missing from the accused device, there is no literal infringement. Becton, 616 F.3d at

1253. "There can be no literal infringement where a claim requires two separate structures and one such structure is missing from an accused device." Id. at 1255-56. Infringement under the doctrine of equivalents exists when "the accused device contains an 'insubstantial' change from the claimed invention" or "the element of the accused device 'performs substantially the same function in substantially the same way to obtain the same result.'" TIP Sys., LLC v. Phillips & Brooks/Gladwin, Inc., 529 F.3d 1364, 1376 (Fed. Cir. 2008) (quoting Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 38-40 (1997)).

Usually, the court should compare the accused product to the claims of the patent, and not a commercial embodiment of the claimed device. Catalina Lighting, Inc. v. Lamps Plus, Inc., 295 F.3d 1277, 1286 (Fed. Cir. 2002). There is no blanket prohibition, however, against comparing the accused device to a commercial embodiment of the patented device. Adams Respiratory Therapeutics, Inc. v. Perrigo Co., 616 F.3d 1283, 1288 (Fed. Cir. 2010). "[W]hen a commercial product meets all of the claim limitations, then a comparison to that product may support a finding of infringement." Id. at 1289.

C. Claims 2-5 and 7-14, Requiring an Annular Chamfer

Fivetech argues that the Series 46 screws cannot infringe claims 2-5 and 7-14 of the '012 patent because those claims require the claimed screw head have an "annular chamfer peripheral to said annular bottom surface of said head portion." '012 Patent col.6 ll.29-33. Fivetech claims that its screws have radiused edges.

To succeed on its claim for literal infringement, Southco must prove that Fivetech's Series 46 screws do contain a chamfered edge. Fivetech uses "standard screws" that are manufactured in high volumes with a cold-forming process, whereas chamfered-edged screws require an additional production operation, such as beveling or chamfering. Wang Decl. ¶¶ 3-4; Dornfeld Decl. ¶¶ 11-12. Rather than having an angle where the beveled surface meets another surface, Fivetech argues that its screws instead have radiused, or rounded edges, caused by the cold-forming process. Dornfeld Decl. ¶¶ 7, 11-12. The cold-forming process results in natural round edges on the top and bottom of the screw head. Wang Decl. ¶¶ 4-5. The round angles are caused by the screw mold, which has round angles in the corners. When the metal is pressed into the mold of the screw head, the round angles are formed on the top and bottom edges as

a result of the mold shape. Id. ¶ 5. Fivetech states that the round edge does not provide any function. Id. ¶ 6.

Fivetech also states that there are distinct differences in function, form, and fabrication between radiused and chamfered edges. Dornfeld Decl. ¶ 6. For example, one difference is that a bevel must be purposefully machined into an edge whereas a radiused edge can result from material flow into a mold that features an internal radiused corner. Id. ¶ 8.

Fivetech's expert states that if the Series 46 screws contained the required annular chamfer, then a chamfered angle would exist on the screw. Id. ¶¶ 6, 12. The tests conducted by Dr. Dornfeld, Fivetech's expert witness, show that the Fivetech fasteners contain radii on the edges of the screw portions of the assemblies, rather than chamfered edges. Id. ¶¶ 11, 12. Without the chamfered edges, the screws cannot literally infringe the '012 patent claims requiring an annular chamfer. Because the Series 46 screws have radiused edges rather than chamfered edges, and such edges are not equivalents in form, function, or fabrication, the screws also cannot infringe those claims under a doctrine of equivalents theory.

Southco argues that Fivetech's demonstrative exhibit used at an earlier hearing shows such a chamfered edge. That demonstrative exhibit, presented to the Court in a PowerPoint

presentation during a hearing, is not the accused product. Similarly, Southco argues from a representative engineering drawing that the drawing shows that the head of the screw has an annular chamfer. Because analyzing those pictures does not assist in comparing the accused product against the patent claims, this argument does not dispute Fivetech's argument that its screw does not feature the chamfered edge.

Dr. Pratt, Southco's expert witness, stated that chamfers can be produced by ways other than "purposeful machining," such as by a cold-forming process. Mot. for Decl. of John D. Pratt, Ph.D., P.E., in Supp. of Southco, Inc.'s Opp'n to Fivetech's Mot. for Summ. J. ("Pratt Decl.") ¶¶ 58-61, ECF No. 218. This argument, however, also has little bearing on whether the accused product produced by Fivetech does, in fact, contain annular chamfers.

Finally, Dr. Pratt states that the Fivetech screws are, in fact, beveled, but those bevels are obscured or distorted in Dr. Dornfeld's photographs. Id. ¶¶ 47, 52-53. Dr. Pratt states that this distortion occurred because the sawing operation used by Dr. Dornfeld to prepare his samples caused burrs, which are typically removed by sanding or polishing in the usual procedure. Id. ¶¶ 48-53. Dr. Pratt's conclusory opinion regarding the interpretation of the photographs,

however, is not supported by any evidence in the record. No reasonable jury could conclude that Fivetech's Series 46 screws have an annular chamfer under either a literal infringement or a doctrine of equivalents theory.

D. Claims 2-5, 11, and 12, Requiring that Material from the Knob Fills the Annular Chamfer

Fivetech argues that its screws do not infringe claims 2-5, 11, and 12 in the '012 patent that "material from said knob fills said chamfer." '012 Patent col.8 ll.7-13; see also id. col.3 ll.29-53. First, Fivetech restates its argument that no chamfer exists on its screws. Second, Fivetech claims that even if its screws did have a chamfer, its injection molding process to manufacture the Series 46 screws does not result in plastic knob material filling that chamfer.

Southco again relies on Fivetech's illustrations in a prior presentation before this Court that allegedly show that no material flows into the chamfer. This argument again is not persuasive because it does not involve any comparison of the accused product to the claims of the patent.

Fivetech's injection molding process used in manufacturing the accused fasteners does not involve knob materials filling a chamfer. The Court wrote in its non-

infringement decision regarding the '095 patent that "[n]o reasonable jury could conclude that Fivetech's process includes displacing knob materials." Southco, Inc. v. Fivetech Tech. Inc., No. 10-1060, 2012 WL 987495, at *4 (E.D. Pa. Mar. 23, 2012), ECF No. 194. That same injection molding process is used to create the accused products. Wang Decl. ¶ 8.

The Court's prior interpretation that no knob materials were displaced is relevant here. The patent specification describes knob material filling or flowing into the chamfer in order to fit the screw head into the knob. The specification states that a "means for attachment of the screw to the knob allows for a press fit of the screw into the knob by filling in a chamfer on the periphery of the screw with material from the inner surface of the knob." '012 Patent col.1 ll.62-65. It further states, "[a]s the screw head 24 is pressed further into the inner surface of the knob 30 . . . , material from the lower end of the region of increased thickness of the knob 33 is pressed such that the material flows into the chamfer 29 area such that this annular ring of material holds the screw head to the knob." Id. col.3 ll.60-65.

Although the word "displace" is not used in the patent claims or specification with relation to the chamfer, that term is used in the preferred embodiment of the patent. The usual

meaning of the word "displace" is "to remove from the usual or proper place: put out of place" or "to crowd out: take the place of especially by force: move from place by occupying the space."

Merriam-Webster's Third New International Dictionary Unabridged (2002). Because the same injection molding process at issue in the earlier opinion is used to create the accused products, the term "displace" can again be used to describe how the knob material flows into or fills the chamfer. The Court's earlier opinion, therefore, that no displacement of knob materials occurs in the Series 46 screws is dispositive. No reasonable jury could conclude that material from the knob in Fivetech's Series 46 screws fills any chamfer on those screws.

E. Claims 1, 6, 8-10, and 14, Requiring that a Plurality of Protrusions Rigidly Secure the Screw Head to the Knob

Fivetech's third argument is that the Series 46 screws cannot infringe claims 1, 6, 8-10, and 14 of the '012 patent because these claims require a screw having a head portion with a "plurality of protrusions" that "rigidly secure" the screw head to the knob. '012 Patent col.6 ll.17-23. Claim 8 of the '012 patent, for example, provides that:

The captive screw . . . wherein said head portion has an outer perimeter and a plurality of protrusions provided on said outer perimeter . . . , said knob has an inner surface, and said protrusions matingly engage

said inner surface of said knob to thereby help rigidly secure said head portion to said inner surface of said knob.

Id. col.7 ll.16-22.

Although the claims use the term "matingly engage" and "rigidly secure" to describe how the head portion of the screw is attached to the knob, those terms are not defined in the claims or in the specification. The patent specification provides that "the screw head with the protrusions rigidly secures the screw head to the inner surface of the knob and provides a press-fit of the screw to the inner surface of the knob." Id. col.1 ll.53-56. The specification further states how the claimed protrusions displace knob material:

These protrusions 26 provide a press-fit to the region of increased thickness 33 on the inner surface of the knob 30 whereby material in the knob 30, which is preferably made from a soft material relative to the screw head 24 such as aluminum, is displaced by the protrusions 26 of the screw 20, which is made from a relatively hard material, such as stainless steel. The screw 20 is thereby rigidly secured to the knob 30.

Id. col.3 ll.31-38.

Southco argues that Fivetech's argument, that knob material must be displaced by the protrusions, is a limitation that does not appear in the claims, and to read the claims as containing the word "displaced" would violate claim construction principles.

Again, the Court noted in its previous opinion that no reasonable jury could find that Fivetech's process includes displacing knob materials. Southco, 2012 WL 987495, at *4. Based on this conclusion, it is logical that no reasonable jury could find that the Series 46 screws contain a plurality of protrusions to rigidly secure a screw to the inner surface of a knob by displacing that knob material. As discussed above, the term "displace" can be used to describe how the knob material interacts with the screw head, and the Court's earlier opinion that no displacement of knob materials occurs in the Series 46 screws is dispositive.

Furthermore, the declarations of Mr. Frattarola and Dr. Pratt do not raise a genuine issue of fact. Mr. Frattarola, an engineer at Southco, performed a torque experiment on Fivetech products that purportedly showed that the knobs of the accused Fivetech products were rigidly secured to the screw head. This experiment does not inform this Court's interpretation of the claims containing the "rigidly secured" language or its decision whether the Series 46 screws infringe the '012 patent language. Nowhere in the patent, or in the intrinsic evidence related to the patent, is the term "rigidly secured" defined in terms of torque. Therefore, no reasonable jury could find that the Series 46 screws contain a plurality of

protrusions to rigidly secure the screw to the inner surface of the knob.

Because the Court is persuaded that no reasonable jury could conclude that the Fivetech Series 46 screws infringe the properly construed claims of the '012 patent, the Court will grant the defendant's motion for summary judgment.

An appropriate Order shall issue.